A continued meeting of the Botetourt County Board of Supervisors and the Botetourt County Planning Commission was held on Tuesday, February 10, 2015, in Rooms 226, 227, and 228 at the Greenfield Education and Training Center, in Daleville, Virginia, beginning at 6:00 P. M.

PRESENT: Board Members: Dr. Donald M. Scothorn, Chairman

Mr. L. W. Leffel, Jr., Vice-Chairman

Mr. Todd Dodson

Mr. John B. Williamson, III

Mr. Billy W. Martin, Sr. (left at 7:00 P. M.)

Planning Comm. Members: Mr. Hiawatha Nicely, Jr., Chairman

Mr. W. R. Thurman, Vice-Chairman

Mr. Steve Kidd Mr. John Griffin

ABSENT: Planning Comm. Members: Mr. Sam Foster

Others present at the meeting:

Mrs. Nicole Pendleton, Planning Manager

Mr. David Moorman, Deputy County Administrator

Mr. Jeff Busby, County Planner Mr. Jim Guynn, County Attorney

Mrs. Kathleen D. Guzi, County Administrator

Dr. Scothorn called the Board of Supervisors meeting to order at 6:03 P. M. and welcomed those present at the meeting.

Mr. Nicely called the Planning Commission meeting to order at 6:04 P. M. and turned the meeting over to Dr. Scothorn.

Dr. Scothorn noted that this meeting between the Board of Supervisors and the Planning Commission is a work session to discuss Zoning Ordinance amendments regarding a proposed Utility-Scale Wind Energy System Ordinance.

Mrs. Guzi expressed appreciation that both the Board of Supervisors and Planning Commission could come together to hear a staff presentation on the components to be considered in a proposed utility-scale wind ordinance and to offer their comments on how the ordinance should be drafted. Mrs. Guzi stated that she and Mrs. Pendleton will ask the Board and Planning Commission members questions about how they would like the proposed ordinance to be crafted based on the information presented at this meeting.

Mrs. Guzi noted that the Board and Commission had previously received a copy of the State's model Utility-Scale Wind Ordinance. She noted that the County is using this model ordinance as a reference, along with information from other sources, in the effort to craft an ordinance for the County. She stated that the purpose of the proposed ordinance would be to permit utility-scale wind farms in the County while protecting the citizens' viewshed.

After discussion, Mrs. Guzi stated that Mrs. Pendleton will give a PowerPoint presentation on various components to be considered in drafting an ordinance and the Board and Commission members are welcome to ask questions at any time. She noted that their dialog and input to the presentation will give staff direction in drafting a quality ordinance.

Mrs. Pendleton stated that this will not be a formal presentation and she encouraged the Board and Commission members to ask questions about the information being presented. Mrs. Pendleton noted that she and the staff will try to answer all questions or follow up with the members with answers to their questions after the meeting.

Mrs. Pendleton stated that the Planning Commission held a kick-off meeting on this proposed ordinance at their January regular meeting and discussed the three components of the Zoning ordinance—administrative, regulatory, and site-specific considerations that occur on a case-by-case basis at a public hearing, related to review of a SEP application. She noted that there are general requirements in the Zoning Ordinance that are applicable to every project; however, there are also specific conditions that make each project unique that can be addressed in a SEP application. Mrs. Pendleton stated that this meeting is to discuss some specific items regarding proposed wind energy systems and meteorological (MET) towers including permitting, appropriate zoning districts for these uses, minimum land area, and regulations regarding appearance, height, setbacks, lighting, noise, etc.

Mrs. Pendleton stated that the staff has reviewed Zoning Ordinances of those Virginia localities that currently have a wind ordinance, e.g., Pulaski County, Roanoke County, Rockingham County, Virginia Beach, and Northampton County. She noted that utility-scale wind energy systems are defined as those that have a rated capacity of 1 megawatt (MW) or greater, consist of one or more wind turbines, and other accessory uses (substations, post-construction MET towers, and electrical infrastructure).

After questioning by Mr. Williamson regarding the MW output of one or more turbines and questioning by Dr. Scothorn regarding the electrical production of such turbines, Mrs. Pendleton stated that wind turbine technology has increased over the past few years and one turbine, such as those now in use in Europe, is capable of producing multiple megawatts of electricity. She noted, for example, that an 80 MW facility would provide energy for "tens of thousands of homes." After further questioning by Mr. Williamson, Mrs. Pendleton stated that most utility-scale wind turbines produce more than one MW of electricity. She noted that the Board and Commission should consider this in developing their definition of a utility wind energy system.

Mrs. Pendleton stated that MET towers are temporary, free-standing meteorological towers that provide real-time data on wind speed and direction and this information is used to assess the area's wind resources for the potential feasibility for a turbine being located at a particular site. She noted that these types of pre-construction, data-gathering towers are usually in place for no longer than 24 months and have varying designs.

After questioning by Mr. Williamson, Mrs. Pendleton noted that MET towers are not currently permitted under the provisions of the County's Zoning Ordinance.

After questioning by Mr. Martin, Mrs. Guzi stated that the MET tower previously located on the Fraley property north of Eagle Rock was removed after action by the Supervisors.

Mrs. Pendleton stated that the staff feels that these types of utility-scale wind systems and temporary MET towers should be allowed by Special Exceptions Permit only and questioned which districts the Board and Commission thought that they should be allowed in—A-1, FC, M-1, M-2, M-3.

After questioning by Dr. Scothorn, Mrs. Pendleton noted that the minimum lot size for these types of uses would be discussed later in her presentation.

After questioning by Mr. Griffin, Mrs. Guzi noted that utility-scale wind systems of this type usually consist of more than one turbine.

Mr. Williamson then questioned if Roanoke Cement Company installed a turbine to provide electricity to their facility would it be considered a utility-scale or a private wind system.

Mrs. Pendleton explained that the scale of wind energy is defined by the rated capacity of the total number of turbines as part of the project. She noted that one turbine producing one

MW of energy would be considered utility-scale, but there are other scales of wind energy which will be incorporated into the ordinance at a later date. For example, she noted that the Volvo plant in Pulaski has one turbine on their property and the Pulaski County Zoning Ordinance defines utility scale systems as those with a rated capacity of one megawatt or greater. She noted; therefore, that the Volvo turbine is not considered a utility-scale system as it generates less than 1 MW of electricity.

After questioning by Dr. Scothorn, it was noted that MET towers are proposed to be limited to a height of 199' in the ordinance.

After questioning by Mr. Dodson regarding Mr. Williamson's scenario of a turbine at Roanoke Cement, Mrs. Pendleton stated that, if Roanoke Cement did submit a SEP for a turbine generating greater than 1 MW of electricity, it would be considered under similar regulations.

After discussion by Mr. Williamson, Mr. Griffin stated that he believes that turbines and MET towers should only be permitted via SEP in the M-2, M-3, and FC zoning districts; however, he was thinking about A-1 with a lot of houses involved and asked if they wanted to think about large A-1 tracts consisting of 10 acres or above.

Mrs. Pendleton noted that any turbine requests would be considered on a case-by-case basis by the Planning Commission and Board of Supervisors and both groups could add conditions to the SEP application.

Mr. Nicely stated that "height can be a good restrictor" of these utility scale wind turbine requests.

Mr. Kidd noted that any wind farm location would depend on the specific site, lot size, and setback.

Mr. Nicely noted that the Volvo turbine is located close to I-81 and provides electricity for parking lot lighting and other uses at the truck manufacturing plant. He further noted that New River Community College also has a similar unit that is located in a solar panel array and provides electricity for parking lot lights and some of the College's buildings.

After questioning by Dr. Scothorn, Mrs. Pendleton noted that she will provide the Board and Commission with photographs of the Volvo wind turbine.

Mrs. Pendleton stated that, in those localities that have utility-scale wind ordinances, temporary MET towers are addressed differently in each ordinance. She noted that some ordinances allow temporary MET towers by right with the issuance of a zoning permit, some require a SEP, and other ordinances define them but do not specifically address them. She noted that the staff is recommending that these towers be approved only by SEP in the County. Mrs. Pendleton stated that any MET towers installed prior to the wind turbines being constructed would have to be approved through the SEP process.

After questioning by Mr. Williamson, Mrs. Pendleton noted that staff is recommending that any MET towers constructed after a utility-scale wind energy system is built would be permitted by right and would only need to obtain a building and zoning permit from the County. She further noted that, by requiring a SEP for temporary MET towers, the Planning Commission and Board would have site-specific control of the proposed design.

After further questioning by Mr. Williamson, Mrs. Pendleton there is a "mixed bag" of permitting requirements in the other Virginia localities that have a utility-scale wind ordinance.

After discussion by Mr. Griffin, Mr. Dodson questioned why it would be necessary to require applicants to obtain a SEP for a MET tower if there is a possibility that the site is not suitable for a wind turbine.

Mrs. Pendleton noted that staff is proposing a minimum lot size of 5 acres per turbine for a utility-scale wind facility and a minimum of 1-2 acres for a MET tower. She further noted that other localities did not have a minimum lot size requirement for MET towers and the Board/ Commission may believe that a minimum lot size for the MET towers may not be necessary.

Regarding the appearance of the turbines, Mrs. Pendleton noted that the staff is recommending that there the turbines be in compliance with Federal Aviation Administration (FAA) standards, maintain a galvanized steel finish or be painted a non-reflective, unobtrusive color such as white, off-white, or gray unless otherwise approved by the Commission, Supervisors, or the Board of Zoning Appeals, no advertising would be permitted on the structure, appropriate warning signage (turbines, electrical equipment, project entrances, 24 hour emergency contact information) would be allowed as would the manufacturer's/installer's identification information.

Mr. Thurman noted that he has not seen any towers of this type with a galvanized finish.

Mr. Griffin noted that these types of structures and cell towers usually have a dull finish so there is no glare from the sun.

After discussion, Mrs. Pendleton noted that she would conduct some additional research on the galvanized finish issue.

Mr. Williamson noted that bridges with a galvanized finish begin to rust after a time. It was noted that the County could require the applicant to paint the structure if it rusts.

Mr. Dodson noted that there would need to be a good, smooth finish on the turbines to reduce drag. He further noted that additional information is needed on this type of finish before a decision is made on the ordinance's language.

Mrs. Pendleton stated that staff is also recommending that the applicant provide data and simulations on the visual impact of the proposed tower/turbines. She noted that the staff wants these structures to have a minimum impact on the visual characteristics of the County. Mrs. Pendleton stated that this data would include photographic simulations both pre- and post-construction views of the property including representations of existing/proposed buildings or tree coverage and scaled elevation views of the site/towers.

After questioning by Mr. Williamson, Mrs. Pendleton noted that with today's computer technology these simulations are feasible.

Regarding height of the proposed turbines, Mrs. Pendleton noted that the staff is recommending a 500' height limit as measured from the ground to the highest vertical portion of the turbine blade when it is fully extended, unless a greater height is approved by the PC/Board through the SEP process. She further noted that staff is recommending a maximum MET tower height of 199'.

After questioning by Dr. Scothorn, Mrs. Pendleton noted that she does not have any information on the maximum wind coverage for the turbines as this information would be site-specific and the applicant would have to demonstrate the best height of the turbines for their needs.

Mr. Williamson then questioned how could the applicant figure the wind speed and obtain other necessary data for a 500' turbine if the MET tower's height is limited to 199'.

After questioning by Mr. Kidd, Mrs. Pendleton stated that the staff is recommending that the ordinance limit the placement of MET towers to a period of 24 months.

Mr. Nicely stated that he understood that, after the initial 24 month placement approval for a MET tower, the applicant could request an additional 24 month extension from the County.

Mrs. Pendleton then noted that the staff is recommending that the proposed setback requirements for the utility-scale wind facilities would be 110% from the adjacent non-participating landowner's property line and at least 150% from the nearest occupied building on a non-participating landowner's property. She noted that the setbacks for MET towers are proposed to be 110% of the total structure height from any property line or comply with the setbacks for the zoning district in which the tower is located, whichever is greater.

After questioning by Mr. Williamson, Mrs. Pendleton stated that these setback limits "are standard across the board;" however, there are ordinances with higher percentages. The Board members stated that they would like to review copies of these setback figures/ordinances.

Mrs. Pendleton noted that regarding lighting requirements, the staff is recommending that no artificial lighting be allowed on the turbines/MET towers unless required by the FAA and, if required by the FAA, the applicant shall provide a copy of this determination to establish the required markings and/or lights for the turbines.

Discussion was then held by the group on a cell tower in Troutville which has the required FAA lighting.

Regarding noise requirements/limits, Mrs. Pendleton noted that the staff is recommending that audible sound from the turbines/MET towers not exceed 60 decibels, as measured from any adjacent non-participating landowner's property line, except during short-term exceptional circumstances, such as severe weather.

After questioning by Dr. Scothorn regarding dBA and dBc resonations and health concerns from these sounds, Mrs. Pendleton stated that the SEP application requirements will include a sound study on the utility wind turbines which includes an assessment of pre- and post-construction conditions, noise complaint response procedures, and protocol for post-construction monitoring of sound by an acoustical engineer licensed in the State.

After questioning by Mr. Martin, Mrs. Pendleton noted that the sound levels would be obtained from the nearest non-participating landowner's property line.

After discussion, Mrs. Pendleton stated that the operator of the wind system would have to comply with the proposed sound study or be in violation of the noise limit provisions.

Mrs. Pendleton then reviewed the timeline for developing/implementing a utility-scale wind ordinance. She noted that the staff will take the comments/suggestions made at tonight's meeting and conduct additional research on the requested items and conduct another work session with the Planning Commission/Board in March to address design, safety, construction, maintenance, decommissioning, application materials, compliance with other State/federal regulations, etc. She stated that a draft ordinance would then be proposed for review in April and public hearings before the Commission and Board scheduled in May.

Mr. Martin stated that he would like the ordinance to be developed in order to make it as easy as possible for the applicants to obtain SEPs through this process. Mr. Martin asked that the County not deter these types of businesses from coming into the County. Mr. Martin stated that he would also like to schedule a site visit to one of the existing wind farms in West Virginia.

Mrs. Pendleton stated that the James Madison University Center for Wind Energy has offered to provide site visits to wind farms.

Mr. Williamson noted that he thinks that members from the Commission and Board should make this visit.

After questioning by Dr. Scothorn regarding taxes that an individual who sells some of their excess wind-generated electricity back to the electric company would be required to pay, Mrs. Guzi stated that the Commissioner of Revenue is checking with the State Corporation Commission in terms of who provides the assessment.

Mr. Williamson noted that he believes that the situation referenced by Dr. Scothorn would be considered an independent power producer under the regulations and would be taxed in that manner.

Mr. Williamson then stated that, during the site visit to West Virginia, he would suggest that the County's representatives meet with the Greenbrier County Building/Planning/Zoning staff to discuss the wind turbine approval and construction process.

Mrs. Guzi noted that the staff will report back to the Commission and Board members on the additional information requested at tonight's meeting and develop a draft ordinance for review in April. She noted that both groups could conduct either a joint public hearing on the draft ordinance or hold separate public hearings as is usually done with proposed ordinance amendments.

Mr. Martin noted that he believes that a joint public hearing would be a good idea.

Mr. Nicely then questioned if a joint work session should be held in advance of the public hearing in order to obtain citizen comment and input prior to the actual hearing.

Mr. Kidd then suggested that a public information session/forum be held before the ordinance is drafted to obtain citizen input. After discussion by Mr. Dodson, Mr. Kidd stated that he believes that the Commission and Board should have an opportunity to obtain public input on this proposed ordinance before it is advertised for public hearing.

Mrs. Pendleton noted that the Planning Commission has no public hearings scheduled for April and a community meeting as mentioned by Mr. Kidd could be held at that time.

Dr. Scothorn stated that he believes that a community meeting similar to the format of the meeting held on the County joining the Western Virginia Water Authority would be advantageous to the citizens, staff, the Commission, and the Board. He noted that there could be various stations for the citizens to view information on the proposed ordinance and offer comments and they could write down their questions and concerns for the staff to answer/consider. Dr. Scothorn also noted that a wind turbine construction company could also have a representative present at the meeting to share information.

Mr. Martin then left the meeting at this time (7:00 P. M.)

After discussion by Mr. Williamson, Mrs. Guzi stated that the staff would report back to the Board and Commission on the additional information requested at tonight's meeting in March and the public forum as mentioned by Mr. Kidd could be scheduled in late March or early April.

Mr. Thurman stated that the site visit to the turbines in Greenbrier County should be scheduled prior to the March work session.

After discussion, Mr. Williamson suggested that a date for this site visit should be chosen to allow one or two members from the Board and Commission to attend.

Mr. Nicely agreed with Mr. Williamson's suggestion.

Mr. Griffin suggested that having a representative from James Madison University's Center for Wind Energy on the trip would be beneficial as well.

Dr. Scothorn noted that also having the Greenbrier County Administrator and some of their Building/Planning staff available at this visit to answer questions and provide information would be helpful.

There being no further discussion, on motion by Mr. Leffel, seconded by Mr. Dodson, and carried by the following recorded vote, the Board meeting was adjourned at 7:07 P. M. (Resolution Number 15-02-01)

AYES: Mr. Williamson, Mr. Dodson, Mr. Leffel, Dr. Scothorn

NAYS: None

ABSENT: Mr. Martin ABSTAINING: None

On motion by Mr. Kidd, seconded by Mr. Griffin, and carried by the following recorded vote, the Planning Commission meeting was adjourned at 7:08 P. M.

AYES: Mr. Griffin, Mr. Kidd, Mr. Nicely, Mr. Thurman

NAYS: None

ABSENT: Mr. Foster ABSTAINING: None